

POWER GENERATOR SYSTEM HAVING DIODE SUPPORT AND RUPTURE
CONTAINMENT DEVICE AND ASSOCIATED METHODS

Abstract Of The Disclosure

5 A power generator system (10) is provided having a
power generator (15) and an exciter (20) for excitation of
the power generator (15). The exciter (20) preferably
includes a diode wheel (30). The diode wheel (30) has an
a rotating support structure (31), a plurality of diodes
(35) mounted to the rotating support structure (31), and
a plurality of a diode support and rupture containment
devices (40) each positioned adjacent a respective one of
the plurality of diodes (35) to support the diode (35) and
10 contain the diode (35) within the confines thereof in the
event the diode ruptures. Each of the diode support and
rupture containment devices (40) preferably includes a
pair of spaced-apart containment members (42, 47) having
the diode (35) positioned therebetween. Each of the
15 containment members (42, 47) is preferably formed of an
insulating material and has a substantially annular shape
to thereby define an insulative disc. A method of
containing material ejected from a diode (35) of a power
generation system (10) is also provided. The method
20 preferably includes pivotally connecting a rupture
containment device (40) to a diode mounting region and
adjacent a diode (35) of the power generation system (10).
The rupture containment device (40) includes at least one
rupture containment member (42, 47) formed of an
25 insulating material.